



Collect and record production data

AHCWRK207

By the end of this topic, you should be able to:

- Identify data to be collected
- Record production data
- Present and store production data

Identifying data to be collected

- There may be a range of horticultural production data that you may collect
 - For example: Germination rates, stock counts, vaccination or medication records, germination rates, quantities harvested
- To determine the specific requirements of the data to be collected, you should refer to work instructions and/or supervisor
 - Apply active listening when receiving instructions
 - Clarify any unclear instructions with your supervisor
 - Be sure to communicate any advice you receive to others (e.g. colleagues)

Identifying data to be collected

- Consider the purpose for which the data is intended to be used. This will allow you to determine:
 - What information needs to be collected (and the extent of the data required)
 - Where it should be collected from (e.g. research, laboratory testing, on-the-job field work, interviews, surveys)
 - Who should collect the data
- Points to consider:
 - The goals/objectives of your business
 - Whether you have performance indicators that enable you to measure progress towards achieving your business goals/objectives
 - Legislative/regulatory requirements you must meet (e.g. WHS)

Identifying data to be collected

- For example:

Data To Be Collected	Source of Data	What Data Will Be Collected? (Data elements)	Extent of Data (I.e. sample, census, one year of data only, specific areas)	Frequency of Collection (I.e. daily, weekly)	Who will Collect the Data?	How will the Data be Collected? (Methods/ Techniques)
Paddock Treatment Record	Farm operator MLA website	- Date - Paddock ID - Area - Product - Batch No. - Application rate and method - Expiry date/ Date of Manufacture - WHP/ESI/EGI - Date paddock safe to graze	Records to be kept for every treatment event	Same day as paddock treatment	Operator	Operator will complete a hardcopy paddock treatment record at the end of the treatment. This is kept in the chemical shed for ease of access. There is a sign on the back of the shed door that reminds operators of the need to update the paddock treatment record before leaving.

Identifying data to be collected

- The type of data being collected will influence the materials or tools required to collect it. For example:
 - When measuring temperatures, you may use single-measurement instruments (e.g. thermometers) or a data logger that records many readings over time
 - When counting moving animals in paddocks, pens or in races, you may use a head-counting method
 - When counting moving animals in a more expansive environment, you may use drones or thermal monitoring systems

Be sure to calibrate any tools before use to ensure that the accuracy of the data collected

Identifying data to be collected

- It is important to consider the difficulties that you may encounter when collecting data, to aim to avoid issues. For example:
 - Consider the environment that you will be working in and use PPE accordingly (e.g. hat and sunscreen when working outdoors)
 - Ensure that the equipment you use can withstand exposure to the elements (e.g. high/low temperatures, moisture)
 - Follow quarantine procedures accordingly (e.g. to avoid spread of pests, diseases or weeds)
 - In Queensland, the Department of Agriculture and Fisheries will outline if notices relating to site quarantine are in effect and the required procedures

Seek advice from your supervisor if you encounter difficulties

- When recording production data, be sure it is:
 - In the format required by your enterprise
 - You may be required to use a particular template or use specific software (e.g. Word, Excel or an industry-based software program)
 - However, this may be a multiple-step process. Rather than having an operator spending 20 minutes waking to and from an office every time they need to enter data, they may be initially done on paper and then entered into a computer program at the end of the day/week/month.
 - You may be required to develop the forms used to record and collate the information
 - Legible, accurate and complete
 - Clearly record the data, being mindful of people's varying backgrounds and abilities

To make good decisions using the data collected, the data must be relevant, valid, sufficient and reliable

- To make good decisions using the data collected, the data must be:
 - **Relevant:** Decipher what data is useful and that which should be disregarded (or not collected in the first place)
 - **Valid:** Ensure that the data is correct and reasonable
 - **Sufficient:** Ensure there is enough data to produce a reliable result
 - **Reliable:** Ensure that you have confidence the data collected (e.g. it is timely, accurate, valid, sufficient, relevant and accessible)

- It is important that production data meets enterprise requirements:
 - Presented in the correct format
 - Using computer systems to manage data offers greater flexibility for aggregating, organising, displaying and reporting data
 - You may be required to translate data from tables into graphs and charts to identify trends
 - You may be required to extrapolate the data to make future projections
 - Stored according to procedures
 - You may be required to physically store production data sheets (e.g. using shelving or filing cabinets)
 - You may be required to download or enter data into a computer system/software
 - Sensitive data may be required to be password protected to only allow access by authorised personnel

- As part of completing turf establishment, you are required to complete the following practices:
 - Shut down, maintain, clean and store tools and equipment
 - Follow manufacturer's specifications
 - Report faults to your supervisor